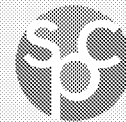

Multi Material Flexible Recovery Collaborative

Co chairs:

Ashley Leidolf, Dow

Sridevi Narayan-Sarathy, PepsiCo

SPC Staff: Tristanne Davis



**SUSTAINABLE PACKAGING
COALITION®**

Agenda

1. Welcome and industry updates
2. Introduction to the Advanced Recycling Alliance at ACC
3. Follow-up discussion from virtual Chemical Recycling Workshop

Industry updates

- U.S. government to provide up to \$4 million to advance development of technologies to convert recovered plastics into feedstock for fuels. [Source](#)
- Nova Chemical and Enerkem partner on Advanced Recycling project in Canada. [Source](#)

Industry updates

- Advanced Recycling Alliance For Plastics Announces new name and members

Source



ADVANCED RECYCLING ALLIANCE FOR PLASTICS

SPC MMFR Collaborative

March 4, 2020



U.S. Resin Manufacturer Sustainability Goals

✓ 2040 Goal

- 100% of plastics packaging is reused, recycled or recovered

✓ 2030 Interim Goal

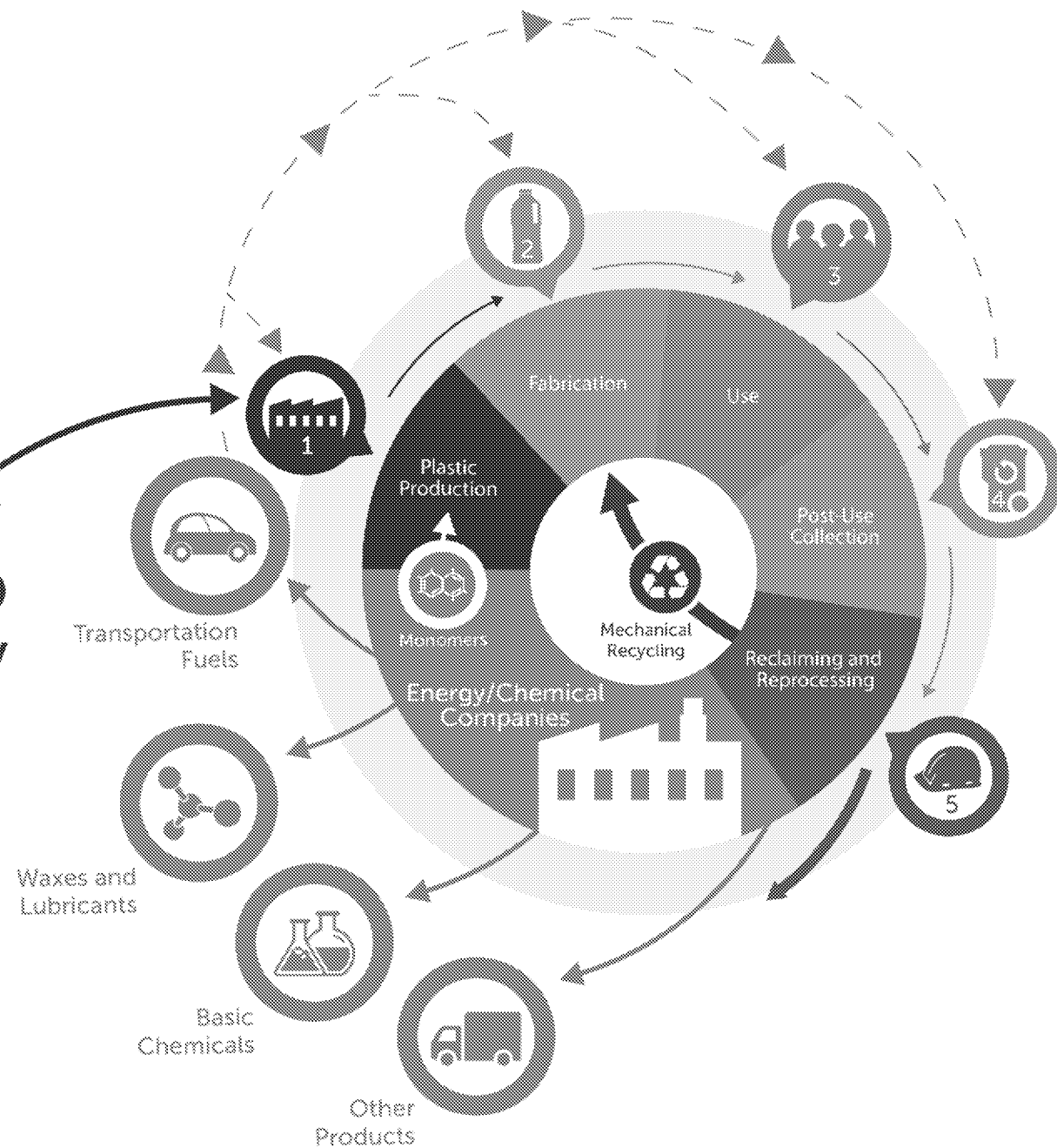
- 100% of plastics packaging is recyclable/recoverable

✓ Best Practice Goal

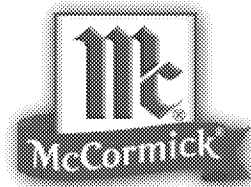
- 100% of Division's U.S. manufacturing sites participate in Operation Clean Sweep Blue by 2020, with all North American sites by 2022

Plastics in a Circular Economy

3%
of Energy



EMF Recycled Content Commitments



Source: <https://newplasticseconomy.org/assets/doc/GC-Spring-Report.pdf>

Investments in Traditional & Advanced Recycling

New Investments in U.S. Plastics Recycling

Announced since July 2017

35

projects in the U.S.

Combined projects valued at

\$4.2

billion

Potential to divert

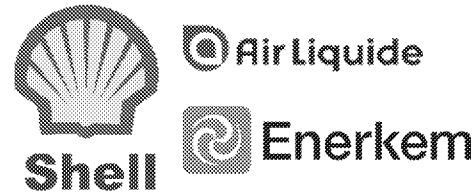
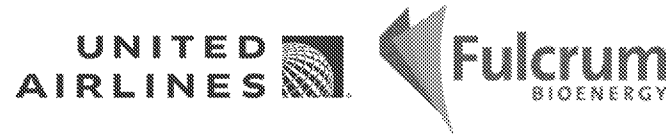
2.7

million tons of waste*
from landfills

*Mostly plastic, but includes other waste
(MSW, cartons, electronics, etc.)

Infrastructure Investments, Circular Solutions

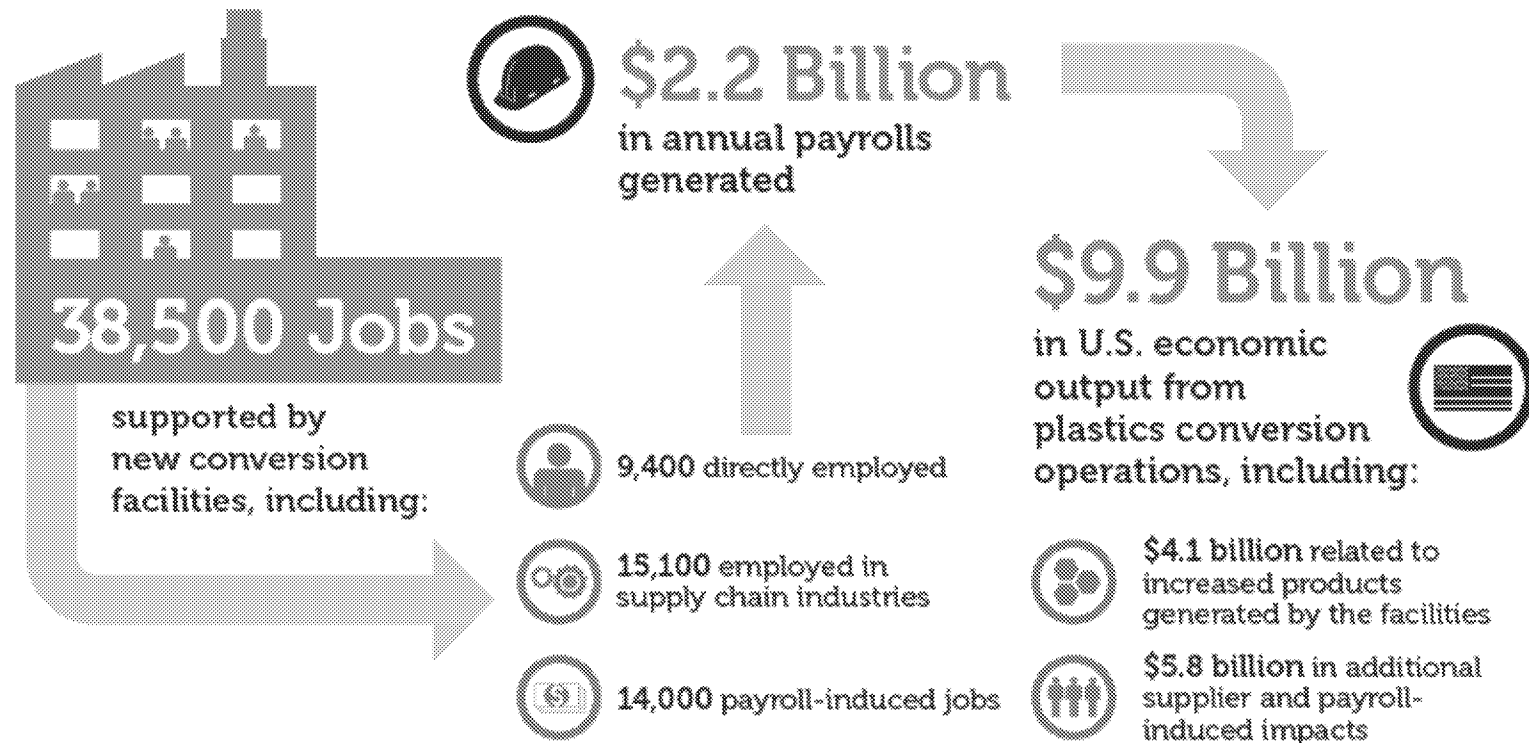
Examples



Economic Impact

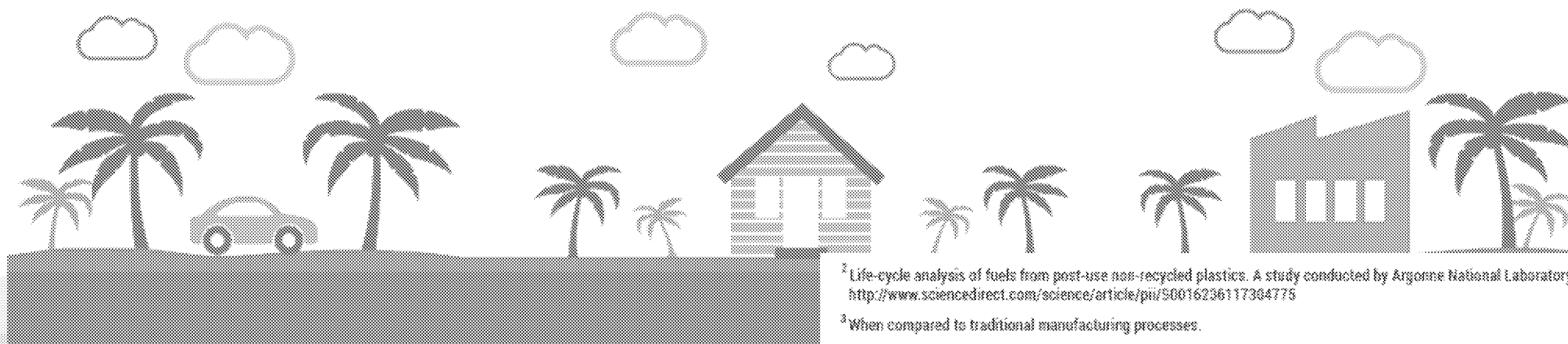
The U.S. could support up to 600 chemical recycling facilities, generating nearly 39,000 jobs

Companies are using advanced recycling and recovery technologies, also known as chemical recycling, to complement ongoing recycling efforts. Growing interest and investments in chemical recycling can reduce the amount of waste sent to landfills and generate a diverse range of raw materials, feedstocks for manufacturing, chemicals and fuels.



Environmental Benefits Are Significant

By converting post-use plastics into ultra-low-sulfur diesel, we reduce:^{2,3}

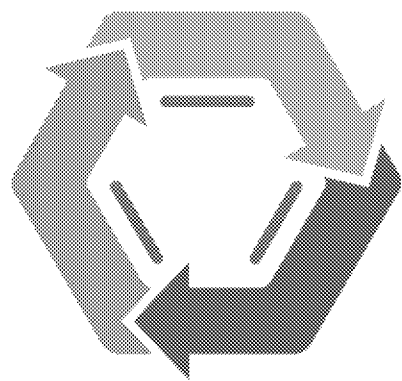


² Life-cycle analysis of fuels from post-use non-recycled plastics. A study conducted by Argonne National Laboratory. <http://www.sciencedirect.com/science/article/pii/S0016236117304775>

³ When compared to traditional manufacturing processes.

Advanced Recycling Alliance for Plastics

Advocating on behalf of technologies that leverage chemistry to convert post-use plastics into new plastics, chemicals, fuels and other products.



**Advanced
Recycling
Alliance for
Plastics**

ADVANCING SOLUTIONS FOR PLASTICS RECYCLING

agilyx

BME
BRIGHTMARK ENERGY

Golden
Renewable
Energy

 **GREENMANTRA**
TECHNOLOGIES

 **NEW HOPE**
ENERGY

 **RENEWLOGY**

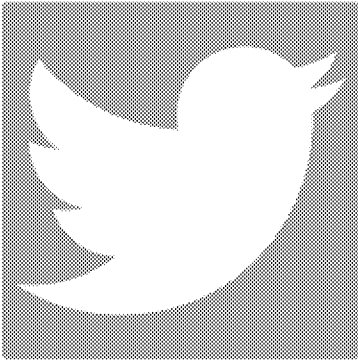
 **AmSty**
Sealed Air

Chevron
Phillips
Chemical Company LP


Ravago

 **TETRA TECH**

Stay Connected



@Adv_Recycling



Advanced Recycling Alliance for Plastics



Prapti Muhuri
Manager, Recycling and Recovery
ACC Plastics Division
prapti_muhuri@americanchemistry.com
(202) 249-6703

Follow-up discussion from virtual Chemical Recycling Workshop

Today's objective

Provide a list of the major points to be expressed in our narrative on our website for people to react to. This will probably be an ongoing discussion for the next several meetings.

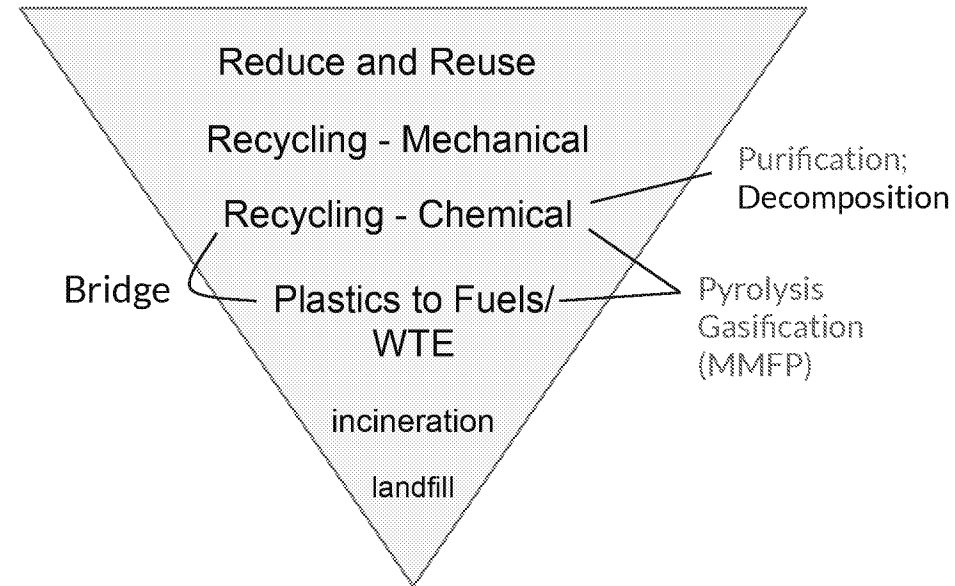
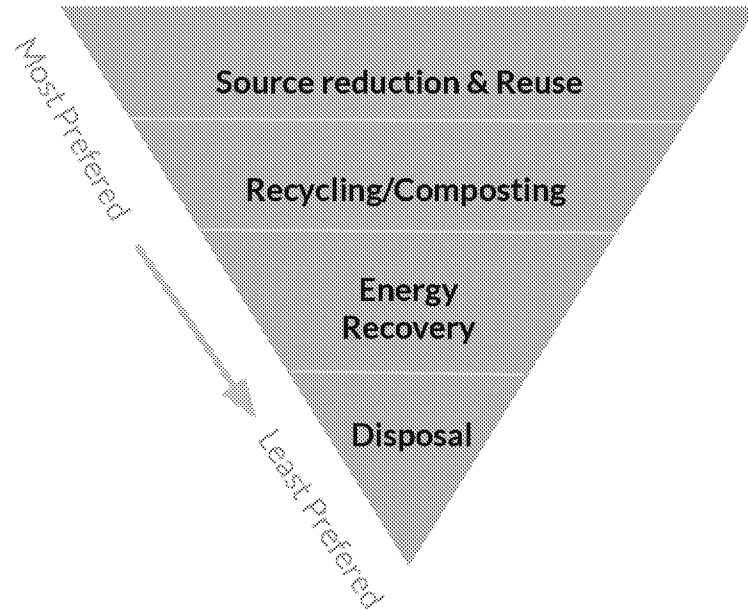
Terminology

- It's important for technologies to fit into definitions of "recycling" to enable their growth. Definitions are important from permitting a plant, to accounting for materials, to consumer claims around recycled content, and financial incentives and program requirements defined by policies.
- Change use of the term "Chemical Recycling" to "Advanced Recycling" to align with others in industry.

The role of Advanced Recycling

- It is more important to consider fate vs. process when evaluating these technologies - The sustainability of AR depends on the market uses for its outputs.
- Differentiate the different technologies. AR is a mix of recycling and fuel production. Some aspects can be classified as recycling while others not.
- Purification or depolymerization processes are clearly recycling by any definition since they produce polymers or monomers.
- AR belongs somewhere near mechanical recycling - above or below depends on output (i.e. is it downcycled? or does it create many markets?)
- Chemical recycling should go above composting, since it saves more energy in the product than compost.

Is Chemical Recycling, Recycling?



Where does chemical recycling fit in?
Where does it fit for MMFP specifically?